

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A variable valve operating device for an engine to adjust a valve lift and a valve timing of the engine, said variable valve operating device comprising:

a rocking cam which is rocked by a cam provided on a rotatable cam shaft;

a rocking cam support member that rockably supports ~~the~~ said rocking cam;

a valve which is opened and closed by a rocking motion of ~~the~~ said rocking cam;

a rocking position changing unit that moves ~~the~~ said rocking cam support member to change a rocking position of ~~the~~ said rocking cam; and

a lock unit that can fix ~~the~~ said rocking cam support member so as not to move during a valve-opening period of ~~the~~ said valve, wherein said lock unit comprises:

a support base that movably supports said rocking cam support member;

an external force applying unit that applies an external force to said rocking cam support member; and

a fixing and holding unit that integrally holds said rocking cam support member on said support base when said external force applying unit applies the external force to said rocking cam support member.

2. (Cancelled)

3. (Currently Amended) The variable valve operating device for an engine according to claim 1, wherein ~~the~~ said lock unit further comprises:~~a support base that movably supports the rocking cam support member; and~~ a push-link which is rocked by an actuator and which pushes ~~the~~ said rocking cam support member toward ~~the~~ said support base when a tip end side of ~~the~~ said push-link abuts against ~~the~~ said rocking cam support member.

4. (Currently Amended) The variable valve operating device for an engine according to claim 1, wherein ~~the~~ said lock unit further comprises:~~a support base that movably supports the rocking cam support member; and~~ a push-link which is rocked by a switch cam integrally formed

on ~~the~~ said rocking cam and which pushes ~~the~~ said rocking cam support member toward ~~the~~ said support base when a tip end side of ~~the~~ said push-link abuts against ~~the~~ said rocking cam support member.

5. (Currently Amended) The variable valve operating device for an engine according to claim 3, wherein ~~the~~ said tip end side abuts against ~~the~~ said rocking cam support member in a state where ~~the~~ said push-link is slightly inclined from a vertical state with respect to ~~the~~ said rocking cam support member.

6. (Currently Amended) The variable valve operating device for an engine according to claim 4, wherein ~~the~~ said tip end side abuts against ~~the~~ said rocking cam support member in a state where ~~the~~ said push-link is slightly inclined from a vertical state with respect to ~~the~~ said rocking cam support member.

7. (Currently Amended) The variable valve operating device for an engine according to claim 1, wherein ~~the~~ said lock unit further comprises:

a lock cam which can turn in association with a valve opening turning motion of ~~the~~ said rocking cam; and

~~wherein the lock cam comprises~~ a stopper which is pushed against a fixed portion when ~~the~~ said lock cam is turned by a predetermined amount.

8. (Currently Amended) The variable valve operating device for an engine according to claim 1, wherein ~~the~~ said rocking position changing unit comprises:

a turnable control shaft; and

a push moving positioning member that pushes and moves ~~the~~ said rocking cam support member, to position ~~the~~ said rocking cam support member by turning ~~the~~ said turnable control shaft to change a rocking position of ~~the~~ said rocking cam.

9. (Currently Amended) The variable valve operating device for an engine according to

claim 8, wherein:

~~the said~~ push moving positioning member is turnably provided on ~~the said turnable~~ control shaft; and

~~wherein~~ a biasing unit that holds ~~the said~~ push moving positioning member at a predetermined position is provided between ~~the said turnable~~ control shaft and ~~the said~~ push moving positioning member.

10. (Currently Amended) The variable valve operating device for an engine according to claim 8, wherein an energy-storing mechanism that stores energy for moving ~~the said~~ rocking cam support member is provided between ~~the said~~ push moving positioning member and ~~the said~~ rocking cam support member.

11. (Currently Amended) The variable valve operating device for an engine according to claim 8, wherein ~~a common~~ said turnable control shaft includes ~~the valves and the push moving positioning members in equal numbers~~ a plurality of said push moving positioning members equal in number to a plurality of said valves.

12. (Currently Amended) The variable valve operating device for an engine according to claim 9, wherein ~~a common~~ said turnable control shaft includes ~~the valves and the push moving positioning members in equal numbers~~ a plurality of said push moving positioning members equal in number to a plurality of said valves.

13. (Currently Amended) The variable valve operating device for an engine according to claim 10, wherein ~~a common~~ said turnable control shaft includes ~~the valves and the push moving positioning members in equal numbers~~ a plurality of said push moving positioning members equal in number to a plurality of said valves.

14. (Currently Amended) The variable valve operating device for an engine according to claim 11, wherein a turning unit that turns ~~the said turnable~~ control shaft comprises a manual

wire or an actuator.

15. (Currently Amended) The variable valve operating device for an engine according to claim 12, wherein a turning unit that turns ~~the~~ said turnable control shaft comprises a manual wire or an actuator.

16. (Currently Amended) The variable valve operating device for an engine according to claim 13, wherein a turning unit that turns ~~the~~ said turnable control shaft comprises a manual wire or an actuator.

17. (Currently Amended) A variable valve operating device for an engine to adjust a valve lift and a valve timing of the engine, said variable valve operating device comprising:

a rocking cam which is rocked by a cam provided on a rotatable cam shaft;

a rocking cam support member that rockably supports ~~the~~ said rocking cam;

a valve which is opened and closed by a rocking motion of ~~the~~ said rocking cam;

a rocking position changing unit that moves ~~the~~ said rocking cam support member to change a rocking position of ~~the~~ said rocking cam; and

a lock unit that can fix ~~the~~ said rocking cam support member so as not to move during a valve-opening period of ~~the~~ said valve, wherein:

~~the~~ said rocking cam support member is disposed between a movable element which is movably provided on ~~the~~ said rocking position changing unit and a support base fixed to ~~the~~ said rocking position changing unit; and

~~wherein the~~ said rocking cam support member is provided between a restriction surface provided on ~~the~~ said movable element and ~~the~~ said support base such that ~~the~~ said rocking cam support member can be sandwiched and fixed therebetween.

18. (Currently Amended) The variable valve operating device for an engine according to claim 17, wherein:

~~the~~ said rocking cam support member comprises, at ~~its~~ both ends thereof, rocking cams

such that ~~the said~~ rocking cams can rock; and

~~wherein~~ a cross sectional shape of a central portion of ~~the said~~ rocking cam support member comprises:

a narrow portion which is narrower than a distance ~~size~~ between ~~the said~~ restriction surface of ~~the said~~ movable element and ~~the said~~ support base portion; and

a wide portion which is slightly wider than the distance ~~size~~.

19. (Currently Amended) The variable valve operating device for an engine according to claim 18, wherein ~~the said~~ movable element comprises a positioning portion which can abut against ~~the said~~ rocking cam support member at a position away from ~~the said~~ restriction surface.